Tuberculosis: FAQs

What is TB disease?

Tuberculosis (TB) is a disease caused by bacteria (germs) that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. Compared to more common bacterial infections like strep throat, tuberculosis is typically a slow moving, but progressive disease that can lead to serious health problems over weeks, months, and years, including death in those who are not diagnosed and treated. Medications are available to cure people who are sickened by tuberculosis or prevent them from ever becoming sick if they are detected and treated in the early stages of the infection. The good news is that 90% of people who are infected with tuberculosis will never become sick from TB because our bodies typically control the infection in a quiet status.

What are the symptoms of TB disease?

The general symptoms of TB disease (that is people who are ill from tuberculosis) include feelings of sickness or weakness, weight loss, fever, and night sweats. The symptoms of TB disease of the lungs also include coughing, chest pain, and the coughing up of blood. Symptoms of TB disease in other parts of the body depend on the area affected. Sometimes, there are no symptoms.

How is TB spread?

TB germs are released into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These germs can stay in the air for several hours, depending on the environment. Persons who breathe in the air containing these TB germs can become infected. People who are infected with TB but who do not have active infection or disease are not able to spread TB to others.

What is the difference between latent TB infection and TB disease?

People with *latent TB infection* (that is, the quiet, non-contagious form of tuberculosis infection) have TB germs in their bodies, but they are not sick because the germs are not active. These people do not have symptoms of TB disease, and they cannot spread the germs to others. However, they may develop TB disease in the future. TB experts recommend that people with latent TB infection receive treatment with special antibiotics to prevent them from developing TB disease (getting sick and potentially contagious from TB).

People with TB disease are sick from TB germs that are active, meaning that the bacteria are multiplying and destroying tissue in the body. People with TB disease usually have the symptoms of TB disease described above. People with TB disease of the lungs or throat are capable of spreading germs to others. Everyone with TB disease is prescribed a cocktail of several drugs that can cure the disease and prevent them from spreading TB to others after they are determined to be non-infectious.

What should I do if I have spent time with someone with latent TB infection?

A person with latent TB infection (a person who has tested positive for TB exposure but is not sick) <u>cannot</u> spread germs to other people. You do not need to be tested if you have spent time with someone with latent TB infection. However, if you have spent time with someone with TB disease (that is someone who is sick from a diagnosed case of TB) or someone with symptoms of TB, you should be tested.

What should I do if I have been exposed to someone with TB disease?

People who are ill with TB disease are most likely to spread the germs to people they spend time with every day, such as family members or coworkers. If you have been around someone who has TB disease, you should go to your doctor or your local health department and request appropriate testing for TB infection.

What does it mean if I have a positive TB skin test?

A positive TB skin test indicates that you have been exposed to someone with TB. The next step is to be evaluated for symptoms of TB by a medical provider and have a chest x-ray. If you don't have symptoms of TB disease and your chest x-ray is normal, you have latent TB infection (quiet TB infection). One out of ten healthy people infected with TB will ever develop active TB disease, and half of those will develop disease within the first 2 years after becoming infected. The risk of developing TB disease is higher If you have a weakened immune system. Taking medication to treat latent TB infection will eliminate or greatly reduce your risk of ever developing TB disease.

How do you get tested for TB?

There are two tests that can be used to help detect TB infection: a skin test or a TB blood test. The Mantoux tuberculin skin test is performed by injecting a small amount of noninfectious fluid (called tuberculin) into the skin in the lower part of the arm. A person given the tuberculin skin test must return within 48 to 72 hours to have a trained health care worker look for a reaction on the arm.

The TB blood test, like the skin test, measures the patient's immune response to the germs that cause TB. If you haven't been infected with TB, the test will be negative. This test is preferred for people who have ever received a vaccination for TB called BCG vaccine.

What is Bacille Calmette-Guèrin (BCG) vaccine?

BCG is a vaccine for TB disease. BCG is used in many countries, but it is not generally recommended in the United States. BCG vaccination does not completely prevent people from getting TB. It may also cause a false positive tuberculin skin test. However, persons who have been vaccinated with BCG can be given a tuberculin skin test or TB blood test safely.

Why is latent TB infection treated?

If you have latent TB infection and therefore do not feel sick it is still highly recommended that you be treated unless it is medically not advisable. One out of ten healthy people infected with TB will develop active TB disease. The risk is higher if you have a weakened immune system. Taking medication to treat latent TB infection will eliminate or greatly reduce your risk of ever developing TB disease. Treatment of latent TB infection is one of the CDC's strategies to eliminate TB in the US. On average each case of TB disease infects 10 additional people. The medications used to treat latent TB infection are usually easier to take and may often be given for a shorter amount of time.

How is TB Disease treated?

TB disease (in people who are ill from TB) can be treated by taking a combination of several drugs for 6 to 12 months. It is very important that people who have TB disease finish their medicine, and take the drugs exactly as prescribed without interruption. Multiple medications are prescribed to treat TB disease. The types of medication prescribed depends on what types of drugs the TB bacteria are susceptible to when tested. The medicines are tablets that can be taken at home. People with TB disease do not usually need to go into the hospital for treatment. If they stop taking the drugs too soon, they can become sick again; if they do not take the drugs correctly, the germs that are still alive may become resistant to those drugs. TB that is resistant to the reliable drugs is more difficult, requires a longer period of treatment, and uses more expensive medications that are not as easy to take. In order to make sure people with TB disease are taking their medications correctly, local health department nurses meet regularly with patients to watch them take their medications. This is called directly observed

therapy (DOT). DOT helps the people with active TB disease complete treatment in the least amount of time and as safely as possible. This method is considered the best standard of medical care in most of the United States, including Indiana.

Is latent TB infection curable? Is TB disease curable?

Yes: both latent TB infection and TB disease are curable if treated in a timely manner and properly. That is why it is so important to get a TB test if you may have been in contact with someone who has TB disease. If you do begin treatment for TB disease or latent TB infection, it is critical to work with your doctor or the health department to get you on the right medications and for you to take your medication every day as directed, until your treatment is completed. This helps you, your family, and your community stay as healthy as possible.

Is someone with TB contagious or infectious?

People with latent TB infection (quiet infection) are NOT infectious and can NOT spread TB to anyone else. Only people with TB disease (ill from TB) of the lungs or throat can spread TB infection to others who breath the same air as the infected person.

People with TB disease in other parts of the body are not infectious. In most cases, after two weeks of taking TB medicine, patients with TB disease will no longer spread bacteria. If a patient is infectious, a nurse or someone from the local or state health department TB Program will assess which people (contacts) need testing and arrange for this to be done.

"Contacts" are often family members, close friends or work mates who spend a lot of time with the person who is ill from TB. **Contact tracing** is always done sensitively and confidentially.

Are there special precautions that a person with TB disease needs to take?

People with TB disease of the lungs or throat should always cover their mouths with a tissue when they cough or sneeze. People with TB disease will be educated by the health department on how to avoid exposing others and may be isolated at home with limited contact with other people outside their immediate family for several weeks until they are advised by their doctor or TB nurse that they will no longer infect others with TB.

Who doTB patients have to tell they have TB disease?

A person's medical information is considered confidential in the United States. TB is no exception. If you have TB infection or disease, only your doctor's office and local health department staff will need to know this information. The health department will help

arrange ways to screen others who may have been exposed to a contagious case of TB in a way that keeps the identity confidential.

Do I have to pay for TB testing or treatment?

There is no charge for the TB screening tests done at your local health department or the TB sputum tests done at the Indiana State Department of Health Laboratory. In addition, the medicines used to treat TB disease or latent TB infection are provided at no cost. Visits to the local health department are also free of charge. However, costs for services provided by your private provider are not covered by the state or local health department.